

REMARKS

The Office Action rejected claims 1, 2, 6, 7, 13, 15, 16, 21, 23 and 24 under 35 U.S.C. § 102(b) as being anticipated by Oberg (U.S. Patent No. 4,991,045).

Oberg discloses a suspension assembly that utilizes plastic and steel pieces. Under one embodiment of Oberg, the plastic pieces are attached to the steel pieces using plastic stakes that extend from the plastic pieces through holes in the steel pieces. Heads are formed on the stakes by melting the plastic either using ultrasonic frequencies or heat. In a second embodiment, the steel is placed within a wall around the edge of the plastic and the wall is then melted over the edge of the steel.

Independent claims 1, 13 and 23 each include limitations to a suspension formed of a metal material that is bonded to a composite material by an adhesive. Oberg does not show the invention of independent claims 1, 13, and 23 because it does not show the use of an adhesive.

In the Office Action it was asserted that Oberg showed the use of an adhesive at col. 5, lines 4-8. However, the cited section does not mention an adhesive. Instead it discusses using staking to connect the plastic to the steel. As shown in FIG. 5, such staking involves passing a plastic post through a hole in the steel and then forming a head on the post by melting the plastic. This melting can be done using heat or ultrasonic frequencies. The melting does not create an adhesive but instead simply reforms the plastic into another shape. Thus, the stake does not adhere to the steel but simply captures the steel in a position between the head of the stake and the body of the plastic.

Since Oberg does not discuss the use of an adhesive to bond the plastic to the steel, it does not anticipate claims 1,

13 or 23 or claims 2, 6, 7, 15, 16, 21, or 24, which depend therefrom.

In addition, using an adhesive to attach the plastic to the steel would not be obvious from Oberg. In Oberg, the plastic and steel are attached at individual points or along the edges of the materials. If adhesive were used to make the point or edge connections, it is possible that the adhesive would fail. In addition, since the adhesive has some thickness, it would create a space between the steel and the plastic. This space could allow the steel to flex, thereby creating a vibration in the suspension. As shown in Oberg, such vibrations are to be avoided. As such, those skilled in the art would not be motivated to replace the staking system taught by Oberg with an adhesive as shown in the present invention.

In light of the comments above, claims 1, 2, 6, 7, 13, 15, 16, 21, 23 and 24 are patentable over Oberg. Reconsideration and allowance of the claims is respectfully requested.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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MARKED-UP VERSION OF REPLACEMENT CLAIMS

13.(Amended) A suspension for a data storage device, the suspension comprising:
a suspension body formed from a layer of metal; and
a composite stiffener formed from a composite material and bonded to a portion
of the suspension body by an adhesive.

21.(Amended) A suspension for a storage device, the suspension comprising:
a suspension body formed from a layer of metal; and
stiffener means formed of a composite material for increasing the stiffness of
selected areas of the suspension and bonded to the suspension body by an
adhesive.